

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
1 September 2005 (01.09.2005)

PCT

(10) International Publication Number  
**WO 2005/080451 A1**

(51) International Patent Classification<sup>7</sup>: **C08F 20/00**, C09J 4/00, C08F 220/58

(21) International Application Number: PCT/US2005/004198

(22) International Filing Date: 9 February 2005 (09.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 60/546,117 19 February 2004 (19.02.2004) US

(71) Applicant (for all designated States except US): **THE LUBRIZOL CORPORATION** [US/US]; 29400 Lakeland Boulevard, Wickliffe, OH 44092 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SEEBAUER, Joseph, G.** [US/US]; 29400 Lakeland Blvd., Wickliffe, OH 44092 (US). **HAVELKA, Kathleen, O.** [US/US]; 29400 Lakeland Boulevard, Wickliffe, OH 44092 (US). **LANGE, Richard, M.** [US/US]; 155 East 207th Street, Euclid, OH 44123 (US).

(74) Agents: **SHOLD, DAVID; M.** et al.; The Lubrizol Corporation, 29400 Lakeland Boulevard, Wickliffe, OH 44092 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/080451 A1

(54) Title: IMPROVING THE LIOPHILIC PROPERTIES OF 2-ACRYLAMIDO-2-METHYLPROPANESULFONIC ACID

(57) Abstract: The lipophilic properties of an ethylenically unsaturated water-soluble polymerizable sulfonic acids are improved by forming a salt thereof with a lipophilic amine. Such salts are readily polymerized in an emulsion or solution process.